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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,003	01/24/2002	Flavia Borella	853063.499	3499

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SEED INTELLECTUAL PROPERTY LAW GROUP PLLC  
701 FIFTH AVE  
SUITE 6300  
SEATTLE, WA 98104-7092

EXAMINER

A, MINH D

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

10/057,003

Applicant(s)

BORELLA ET AL.

Examiner

Minh D A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-16 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 1, 3-9 and 13 are rejected under 35 U.S.C. 102(b) as being unpatentable by Konopka (US 6,501,225).

Regarding claims 1, 7 and 13, Konopka discloses a ballast with efficient filament preheating and lamp fault protection comprising a filament mode for preheating filaments of the lamp by applying a low current for a predetermined time; ignition mode for igniting the lamp by increasing at a predetermined increasing rate a voltage applied to the lamp up to a predetermined ignition value; lamp out detection circuit (800) for monitoring a lamp current of the lamp; a protection circuit (300) for the lamp current is over a -predetermined threshold, repeating the steps of igniting the lamp and monitoring

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the lamp current without repeating the preheating step; and powering the lamp at normal operating conditions (only when the lamp is disconnected, the fault mode does not occur without disconnected lamp). See figures 1-3, col.2, lines 46-67 to col.5, lines 1-52.

Regarding claim 3, Konopka discloses after having repeated the steps of igniting the lamp and monitoring the lamp current for a predetermined numbers of times the lamp does not work correctly, the electronic ballast is turned off. See col.3, lines 60-67 to col.4, lines 1-67.

Regarding claims 4-6 and 8, Konopka discloses the pre-heating, igniting, monitoring, repeating, and power steps are performed in response to a fault during working and wherein if the fault during lamp working occurs a predetermined number of times, the electronic ballast is turned off. See figure 1-3, col.3, lines 6-67 to col.5, lines 1-52.

Regarding claim 9, Konopka discloses the electronic ballast includes a drive circuit (100) that drives the lamp and a controller (500) that control the drive circuit, the controller (500) including a timing supplies a begin-ignition signal during the ignition period and during the re attempting step, and continues to disable the begin-preheating signal in response to determining t1iit the lamp has not ignited within the ignition period. See figures 1-5, col.3, lines 41-67 to col.9, lines 1-58.

***Allowable Subject Matter***

3. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does teach that, the timing and protection circuit includes a timing capacitor and a flip-flop having an input coupled to the timing capacitor, a first output that produces the begin-preheating signal, and a second output that produces the begin-ignition signal and charging the timing capacitor in response to receiving a reset signal, measuring a voltage across the timing capacitor, determining whether the voltage across the timing capacitor exceeds a threshold, and, in response to determining that the voltage across the timing capacitor exceeds the threshold, driving the first output into a disabled state and driving the second output into an enabled state in combination with all limitations recited in dependent claim 10.

4. Claims 14-16 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does teach that, the timing and protection circuit includes a timing capacitor and a flip-flop having an input coupled to the timing capacitor, a first output that produces the begin-preheating signal, and a second output that produces the begin-ignition signal and charging the timing capacitor in response to receiving a reset signal, measuring a voltage across the timing capacitor, determining whether the

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voltage across the timing capacitor exceeds a threshold, and, in response to determining that the voltage across the timing capacitor exceeds the threshold, driving the first output into a disabled state and driving the second output into an enabled state in combination with all limitations recited in independent claim 14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jayaraman et al. (US 5,650,569); Primisser et al. (US 6,400,095); Krummel. (US 6,310,447); Chiang et al. (US 6,420,839) are cited to show the electronic ballast for at least one discharge lamp.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (703) 605-4247. The examiner can normally be reached on M-F (7:30 –4:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (703) 308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and (703) 872-9319 for final communications.

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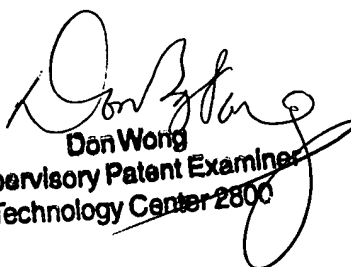
Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

Examiner

Minh A

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7/23/03

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800